

ABSTRACT OF THE DISCLOSURE

A ceramic honeycomb filter comprising pluralities of porous ceramic honeycomb structures 1A, 1B each having large numbers of flow paths 41, 42, 43 partitioned by cell walls 30, which are connected to each other in a flow path direction, desired flow paths being sealed such that an exhaust gas passes through pores of the cell walls 30, the cell walls 31 of at least one honeycomb structure 1A being connected by plugs 50 to the cell walls 32 of a honeycomb structure 1B adjacent thereto with a gap 54 in the flow path direction, and a catalyst being carried by at least part of the cell walls 30 and/or the plugs 50, 52, an exhaust gas-cleaning apparatus comprising the ceramic honeycomb filter and a fuel-adding means disposed upstream thereof, and an exhaust gas-cleaning method using the ceramic honeycomb filter.